



Machine Id
513004
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0070124	---	---
Sample Date		Client Info		14 Feb 2024	---	---
Machine Age	hrs	Client Info		111550	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				MARGINAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	37	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	10	---	---
Lead	ppm	ASTM D5185(m)	>40	6	---	---
Copper	ppm	ASTM D5185(m)	>330	151	---	---
Tin	ppm	ASTM D5185(m)	>15	2	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

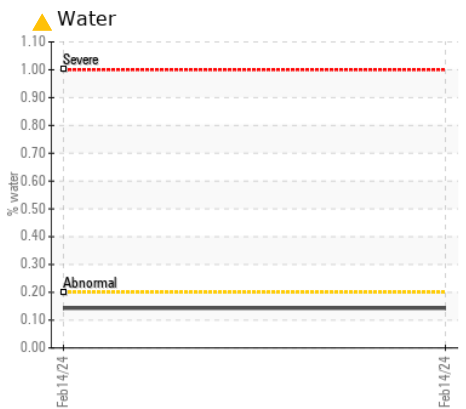
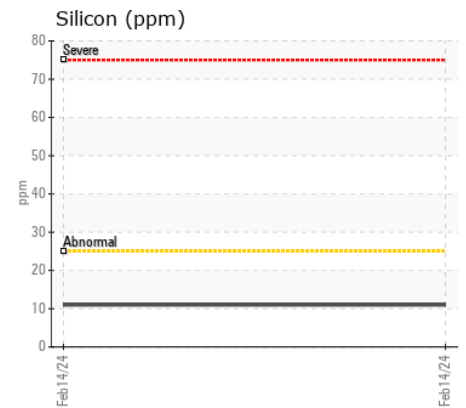
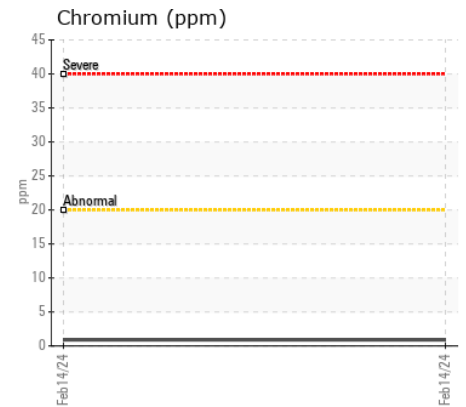
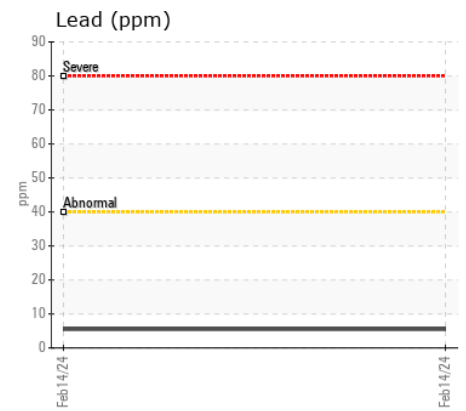
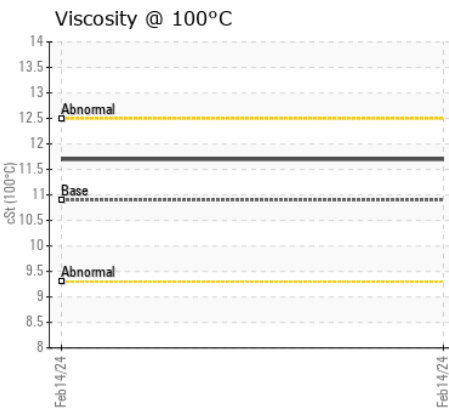
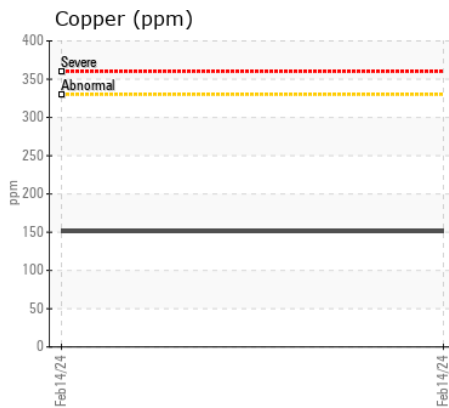
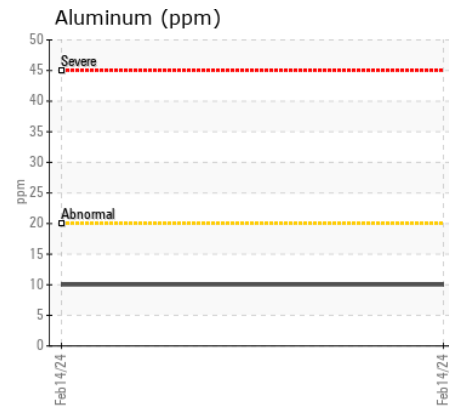
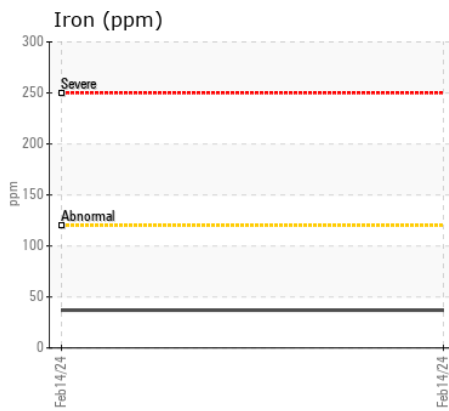
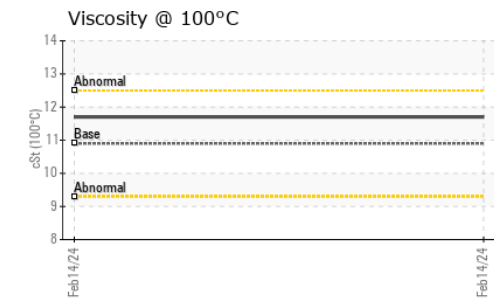
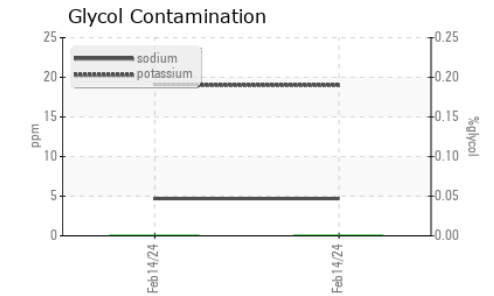
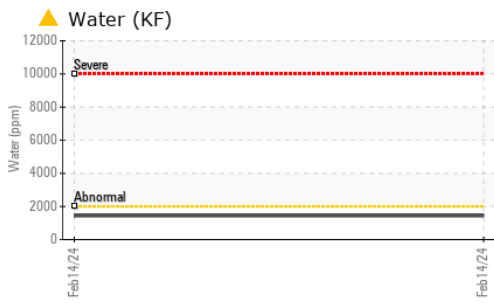
There is a trace of moisture present in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>25	11	---	---
Potassium	ppm	ASTM D5185(m)	>20	19	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water	%	ASTM D6304*	>0.2	▲ 0.143	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 1440	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>4	0.8	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.6	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.7	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	▲ .2%	---	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		5	---	---
Boron	ppm	ASTM D5185(m)	250	7	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	70	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	450	1085	---	---
Calcium	ppm	ASTM D5185(m)	3000	966	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	946	---	---
Zinc	ppm	ASTM D5185(m)	1350	1184	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2388	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.7	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0070124
Lab Number : 02617379
Unique Number : 5734489
Test Package : MOB 1 (Additional Tests: Glycol, KF, Visual)

GFL Environmental - 853 - Antigonish
 17 Adam St
 Antigonish, NS
 CA B2G 2G1
 Contact: Nicole Haverkort
 nhaverkort@gflenv.com
 T: (902)863-1744
 F: (902)863-2084

Received : 22 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 23 Feb 2024 - Kevin Marson
 To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.